

# TC-102A

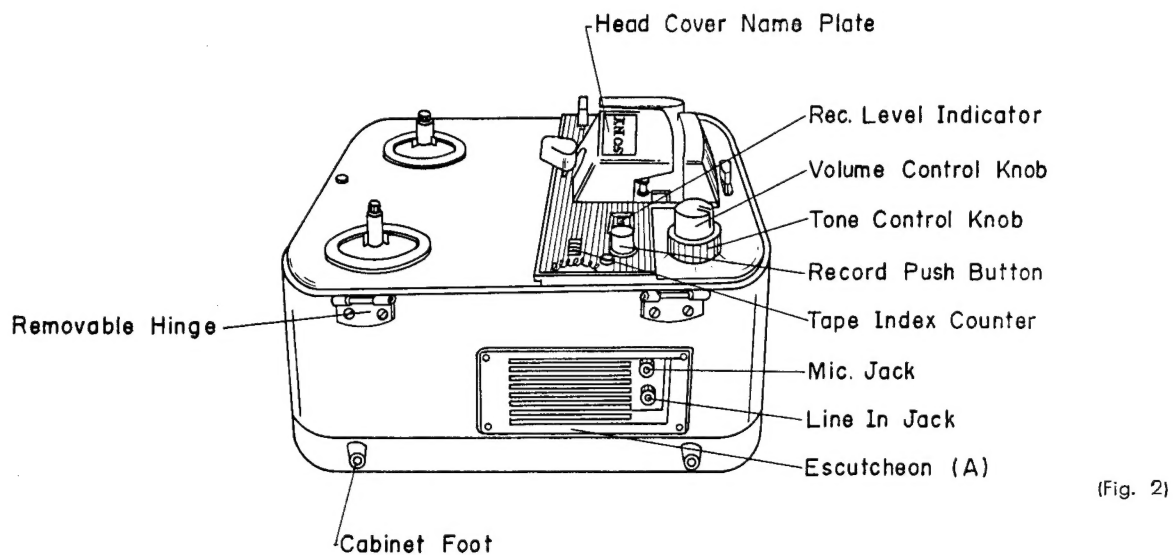
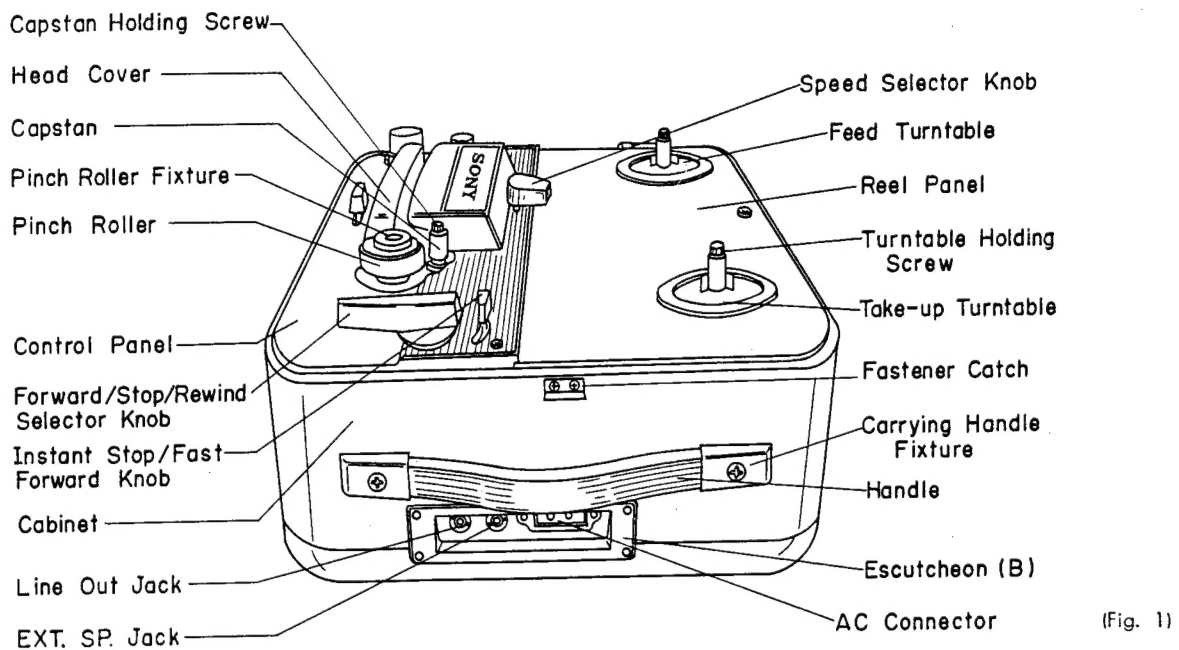


## Specifications

Power Requirement :	100, 110, 117, 125, 220 or 240 volts (Voltage selector provided in the set) AC 50 or 60 c/s (convertible, see Page 5)
Tape Speeds :	Instantaneous selection 7-1/2 ips or 3-3/4 ips (19 or 9.5 cm/s)
Tracks :	Dual
Reel Size :	Up to 7"
Frequency Response :	50~13,000 c/s at 7-1/2 ips 50~8,000 c/s at 3-3/4 ips
Flutter and Wow :	Less than 0.2% RMS at 7-1/2 ips
Bias Frequency :	Approx. 55 Kc
Inputs :	Low impedance Microphone Input ... (1) High impedance Auxiliary Input ..... (1)
Outputs :	High impedance Monitor Output ..... (1) 8 $\Omega$ External Speaker Output ..... (1)
Speaker :	6" $\times$ 4" (15 $\times$ 10 cm) dynamic, 8 $\Omega$
Power Output :	Maximum 2 watts
Recording Time :	45 minutes per track, 1.5 hours total at 7-1/2 ips
(with 1800' Tape)	1.5 hours per track, 3 hours total at 3-3/4 ips
Tube Complement :	6AU6 ( $\times$ 1 ), 6AR5 ( $\times$ 1 ), 5MK9 ( $\times$ 1 )
Transistor :	2SC318 ( $\times$ 1 )
Dimensions :	13.4" W $\times$ 10.4" D $\times$ 7.5" H ( 340 W $\times$ 265 D $\times$ 190 H mm )
Weight :	Approx. 18.3 lbs. ( 8.3 Kg ) ( without accessories )

**SONY®**  
**SERVICING GUIDE**



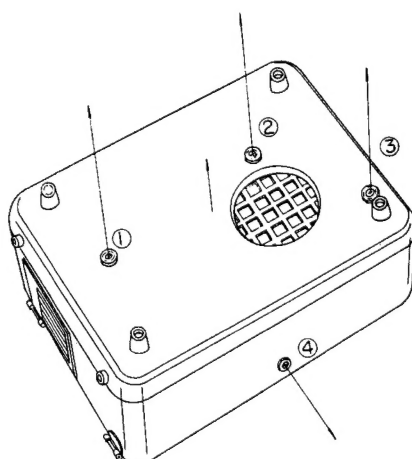
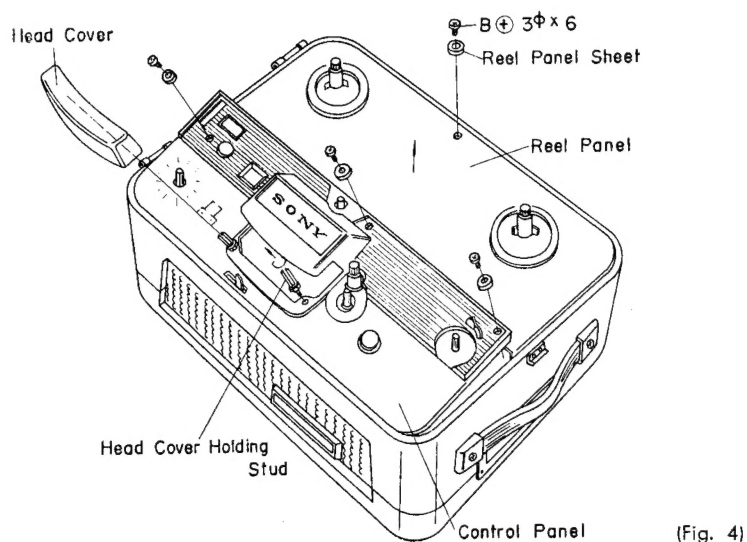
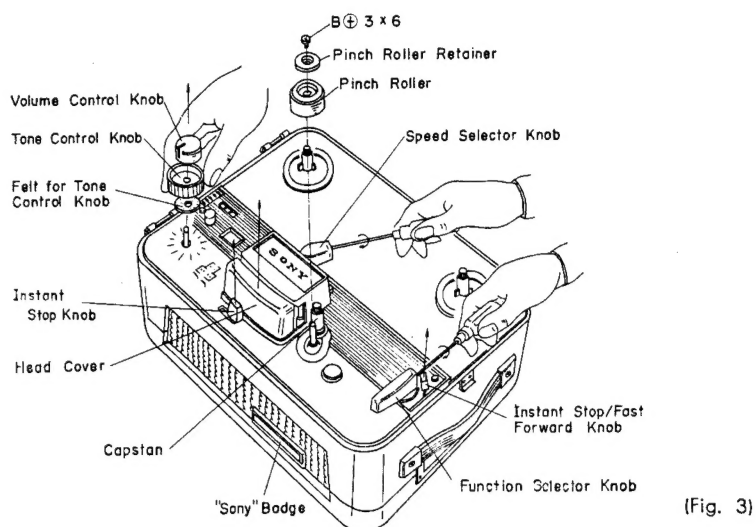


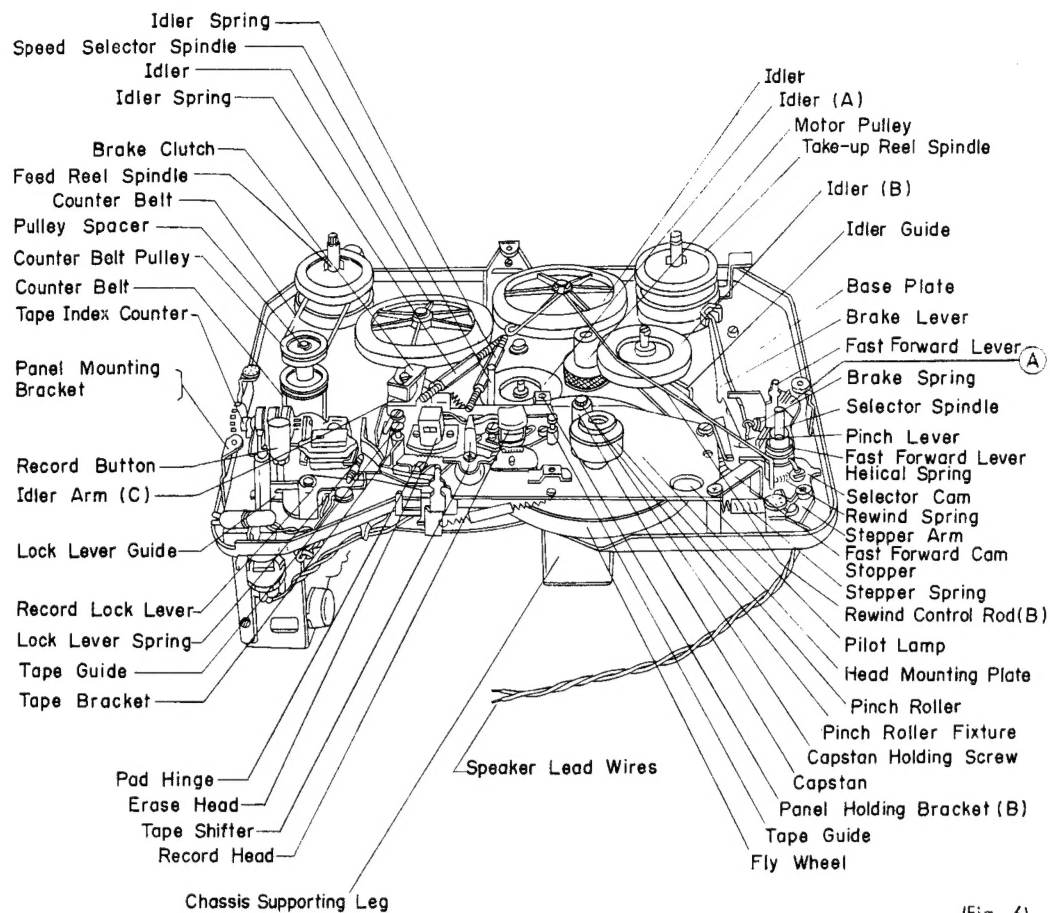
## Removal of Panels

1. Remove Head Cover (without "SONY" on it), Volume Control Knob, Tone Control Knob, Felt for Tone Control Knob, Instant Stop Knob and Fast Forward Knob by pulling straight up as shown in Fig. 3.
2. Remove Speed Selector Knob and Function Selector Knob with 2 mm screw driver.
3. Remove Pinch Roller Holding Screw with 3 mm Phillips screw driver, and take off Pinch Roller Retainer and Pinch Roller.
4. Loosen and remove three screws holding control panel, and one screw on Reel Panel as shown in Fig. 4).

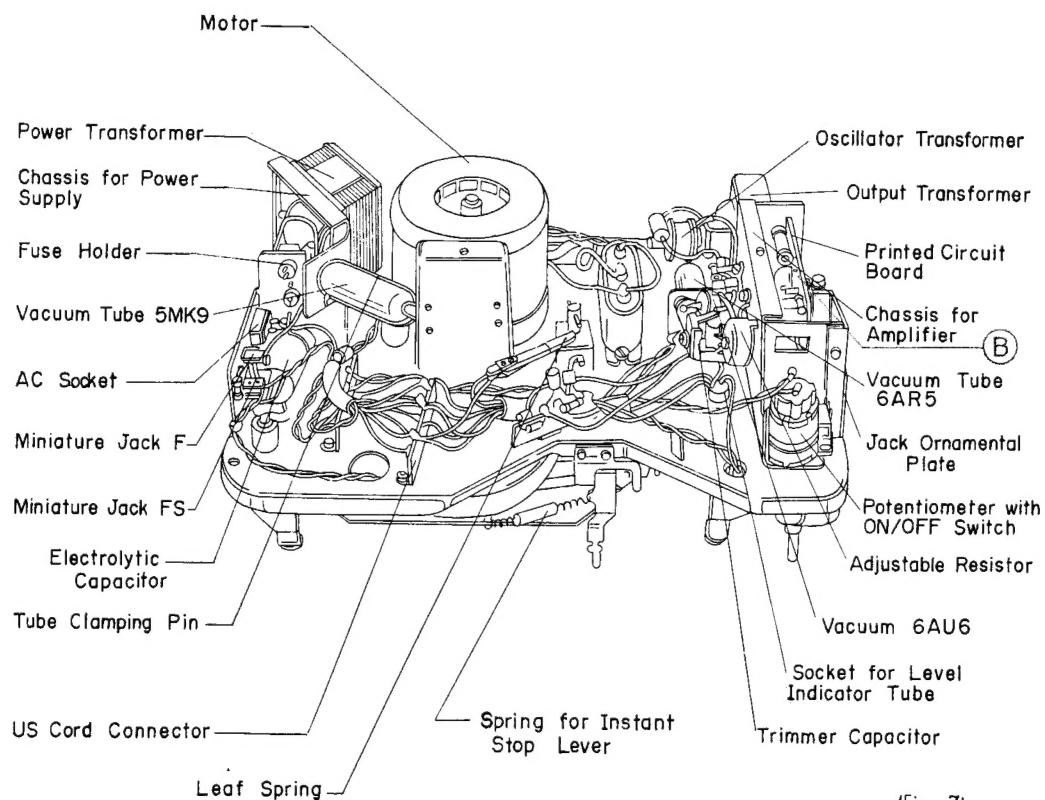
## Removal of Cabinet

1. Turn over the recorder upside down on a soft pad.
2. Loosen and remove three securing screws (①, ② & ③ in Fig. 5) on the bottom of the Cabinet and one securing screw ④ in Fig. 5) on the back side.
3. Remove the set by holding up the Cabinet gently and carefully.
4. Unsolder the Speaker lead wires with a soldering iron.





(Fig. 6)



(Fig. 7)

## Alignment Procedure

The alignment is to be performed at a tape speed of 7-1/2 ips unless otherwise specified.

### A. Azimuth Alignment

1. Connect an  $8\ \Omega$  load resistor in parallel with a VTVM terminals and connect the VTVM to the Speaker Output Jack ( $J_4$ ).
2. Place the recorder in play mode. Set the Volume Control at "7" to "8" on the scale.
3. Playback the 7,000 c/s tone recorded on the SONY alignment tape "B-19-A1".
4. Adjust the azimuth alignment screw located on the right side of the Rec/PB Head to obtain the maximum reading on the VTVM.

### B. Bias Trap Adjustment

1. Connect plus  $\oplus$  lead of VTVM to one terminal of Trap Coil which is soldered on the Printed Circuit Board, and the minus  $\ominus$  lead to Chassis ground.
2. Place the recorder in record mode without input signal.
3. Adjust core of the Trap Coil to obtain the minimum reading on the VTVM.

### C. Recording Bias Adjustment

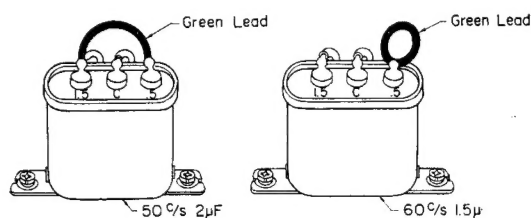
1. Place the recorder in record mode.
2. Connect a VTVM across the winding of the Rec/PB Head.
3. Adjust the Potentiometer ( $VR_4$ ) so that the VTVM reads approx. 35 V.

### D. Recording Level Adjustment

1. Connect a VTVM to  $J_8$  (Monitor Jack).
2. Stop the Bias Oscillation by shortcircuiting the Muting Switch ( $SW_4$ ) (marked with  $\textcircled{A}$  in Fig. 6) with a clip.
3. Place the recorder in record mode.
4. Feed 1,000 c/s signal of -60 dBs (0.775 mV) through  $J_2$  (MIC Jack) and adjust Volume Control ( $VR_1$ ) so that the VTVM indicates -8dBs (300 mV).
5. Adjust the potentiometer ( $VR_3$ , marked with  $\textcircled{B}$  in Fig. 7) so that the pointer of Level Meter is just on the boundary between red portion and black portion while monitoring output as read on the VTVM is kept at -8dBs (300 mV) by re-adjustment of  $VR_1$  if necessary.

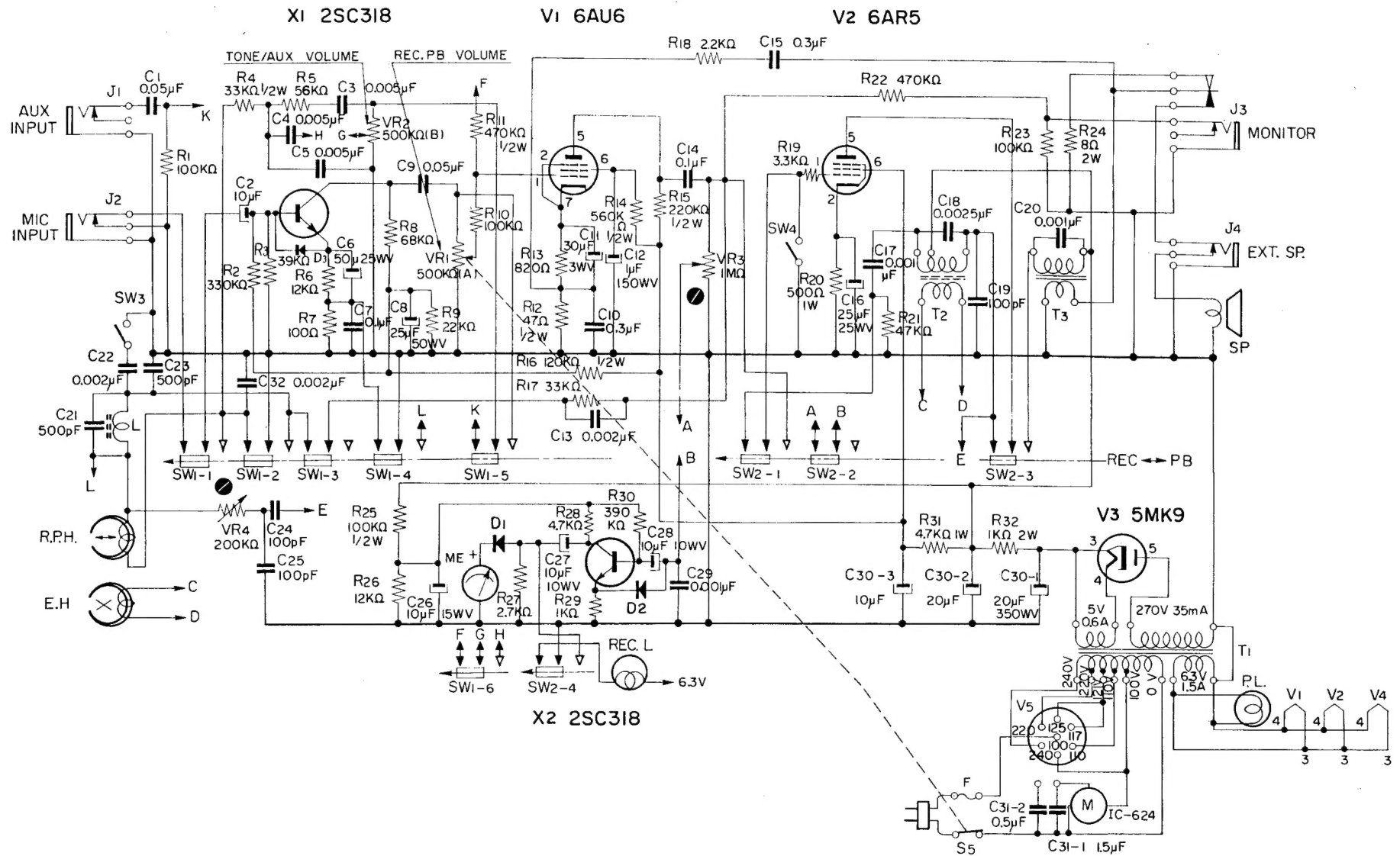
## Modification to different power line frequency

	For 50 c/s	For 60 c/s
1. Connection between two terminals of the metal cased capacitor (MP, $C_{81}$ )	Connected ( $2\mu\text{F}$ )	Disconnected ( $1.5\mu\text{F}$ )
2. Capstan	(N10) 0-041-012-03	(N11) 0-041-227-04
3. Pinch Roller	(P4) 0-027-476-01	(P5) 0-027-477-01



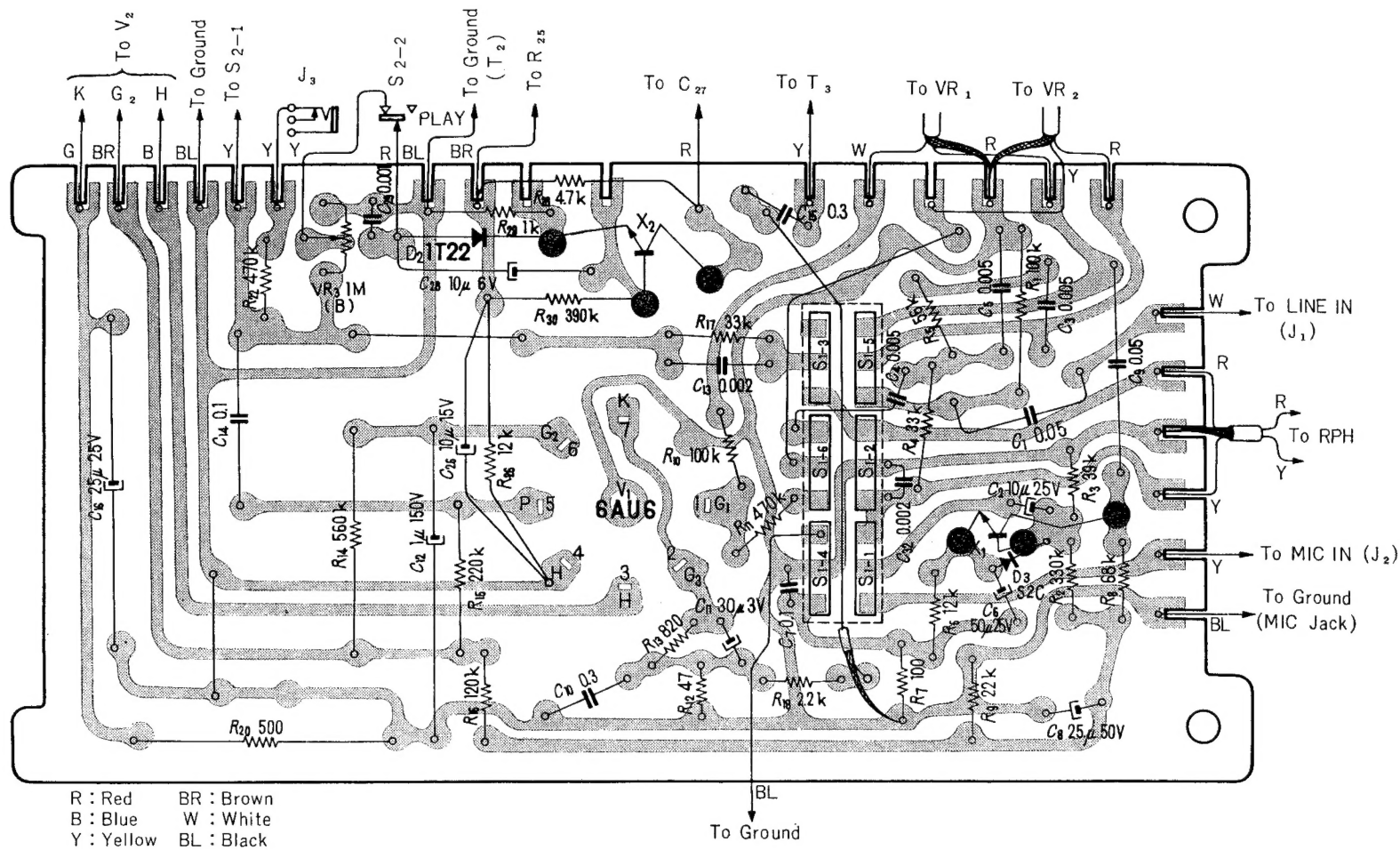
(Fig. 8)

# Schematic Diagram



# Mounting Diagram

—Printed Side—



# Parts List

## I. ELECTRICAL PARTS

Symbol No.	Description	Q'ty	Remarks	Symbol No.	Description	Q'ty	Remarks
<b>E. Electrical Parts (General)</b>				R <sub>12</sub>	Composition 47 $\Omega$ RC $\frac{1}{2}$ $\pm 10\%$	1	
E1	Printed Circuit Board	1	A8	R <sub>13</sub>	Carbon 820 $\Omega$ RD $\frac{3}{4}$ L $\pm 5\%$	1	
E2	Lamp Socket	2		R <sub>14</sub>	Composition 560 K $\Omega$ RC $\frac{1}{2}$ $\pm 20\%$	1	
E3	Fuse Holder	1		R <sub>15</sub>	" 220 K $\Omega$ " " "	1	
E4	Vacuum Tube Socket	1		R <sub>16</sub>	" 120 K $\Omega$ " " $\pm 10\%$	1	
E5	" " "	2		R <sub>17</sub>	Carbon 33 K $\Omega$ RD $\frac{3}{4}$ L $\pm 5\%$	1	
E6	Crank Pin	2		R <sub>18</sub>	" 2.2K $\Omega$ " " "	1	
E7	Terminal Strip 1L-5P	1		R <sub>19</sub>	" 3.3K $\Omega$ " " "	1	
E8	" " 2L-5P	3		R <sub>20</sub>	" 500 $\Omega$ RD1L " "	1	
E9	AC Socket	1		R <sub>21</sub>	" 47 K $\Omega$ RD $\frac{3}{4}$ L " "	1	
E10	Terminal Strip 1L-2P	1		R <sub>22</sub>	" 470 K $\Omega$ " " "	1	
<b>Transistor</b>				R <sub>23</sub>	" 100 K $\Omega$ " " "	1	
X <sub>1</sub>	Transistor 2SC318-3	1		R <sub>24</sub>	" 8 $\Omega$ RD2SP $\pm 5\%$	1	
X <sub>2</sub>	" 2SC318-2	1		R <sub>25</sub>	Composition 100 K $\Omega$ RC $\frac{1}{2}$ " "	1	
V <sub>1</sub>	Vacuum Tube 6AU6	1		R <sub>26</sub>	Carbon 12 K $\Omega$ RD $\frac{3}{4}$ L " "	1	
V <sub>2</sub>	" " 6AR5	1		R <sub>27</sub>	" 2.7K $\Omega$ " " "	1	
V <sub>3</sub>	" " 5MK9	1		R <sub>28</sub>	" 4.7K $\Omega$ " " "	1	
D <sub>1</sub>	Diode 1T206 (1T213)	1		R <sub>29</sub>	" 1 K $\Omega$ " " "	1	
D <sub>2</sub>	" 1T211	1		R <sub>30</sub>	" 390 K $\Omega$ " " "	1	
D <sub>3</sub>	" S2C	1		R <sub>31</sub>	" 4.7K $\Omega$ RD1P $\pm 20\%$	1	
RPH	Record/Playback Head PP18-28	1		R <sub>32</sub>	" 1 K " " $\pm 5\%$	1	
EH	Erase Head EF18-27	1		<b>Capacitor</b>			
T <sub>1</sub>	Power Transformer	1		C <sub>1</sub>	Mylar 0.05 $\mu$ F 50WV $\pm 10\%$ (MFL)	1	
T <sub>2</sub>	Bias OSC Transformer	1		C <sub>2</sub>	Electrolytic 10 $\mu$ F 25WV	1	
T <sub>3</sub>	Output Transformer	1		C <sub>3</sub>	Mylar 0.005 $\mu$ F 50WV $\pm 20\%$ (MFL)	1	
L	Trap Coil 20 mH	1		C <sub>4</sub>	" " " " " "	1	
SW <sub>1</sub>	Record/Playback Switch 6P-2t	1		C <sub>5</sub>	" " " " " "	1	
SW <sub>2</sub>	" 4P-2t	1		C <sub>6</sub>	Electrolytic 50 $\mu$ F 25WV	1	
SW <sub>3</sub>	Rec. Equalizer Switch	2		Mylar			
SW <sub>4</sub>	Muting Switch	2		C <sub>7</sub>	0.1 $\mu$ F 35WV $\pm 30, 20\%$ (MFL)	1	
SW <sub>5</sub>	Power Switch	1		C <sub>8</sub>	Electrolytic 25 $\mu$ F 50WV	1	
J <sub>1</sub>	Aux. Input Jack (MINI)	2		Mylar			
J <sub>2</sub>	MIC Input Jack "	2		C <sub>9</sub>	0.05 $\mu$ F 50WV $\pm 10\%$ (MFL)	1	
J <sub>3</sub>	Monitor Jack " (HS)	1		C <sub>10</sub>	0.3 $\mu$ F 50WV $\pm 30, 20\%$ ( " )	1	
J <sub>4</sub>	Ext. Speaker Jack "	1		C <sub>11</sub>	Electrolytic 30 $\mu$ F 3WV	1	
SP	Speaker	1		C <sub>12</sub>	" 1 $\mu$ F 150WV	1	
PL	Pilot Lamp	2		C <sub>13</sub>	Mylar 0.002 $\mu$ F 50WV $\pm 10\%$ (MFL)	1	
ME	Level Meter	1		C <sub>14</sub>	Oil Paper 0.1 $\mu$ F 400WV "	1	
M	Motor IC-624	1		C <sub>15</sub>	Mylar 0.3 $\mu$ F 50WV " (MFL)	1	
F	Fuse 1.5A	1		C <sub>16</sub>	Electrolytic 25 $\mu$ F 25WV	1	
VS	AC Voltage Selector	1		C <sub>17</sub>	Oil Paper 0.001 $\mu$ F 400WV $\pm 10\%$	1	
<b>Resistor</b>				Polyethylene			
VR <sub>1, 2</sub>	Volume Control (combination type) A500 K $\Omega$ + B500 K $\Omega$ w/switch	1		C <sub>18</sub>	0.0025 $\mu$ F 600WV $\pm 10\%$	1	
VR <sub>3</sub>	Adjustable Resistor 1 M $\Omega$	1		C <sub>19</sub>	100PF 600WV $\pm 20\%$	1	
VR <sub>4</sub>	" " 200 K $\Omega$	1		C <sub>20</sub>	Oil Paper 0.001 $\mu$ F 400WV $\pm 10\%$	1	
R <sub>1</sub>	Carbon 100 K $\Omega$ RD $\frac{3}{4}$ L $\pm 5\%$	1		Polyethylene			
R <sub>2</sub>	" 330 K $\Omega$ " " "	1		C <sub>21</sub>	500PF 250WV $\pm 5\%$	1	
R <sub>3</sub>	" 39 K $\Omega$ " " "	1		C <sub>22</sub>	0.002 $\mu$ F 100WV $\pm 10\%$	1	
R <sub>4</sub>	Composition 33K $\Omega$ RC $\frac{1}{2}$ $\pm 10\%$	1		C <sub>23</sub>	Mica 500PF 500WV $\pm 10\%$	1	
R <sub>5</sub>	Carbon 56 K $\Omega$ RD $\frac{3}{4}$ L $\pm 5\%$	1		C <sub>24</sub>	Polyethylene 100PF 600WV $\pm 20\%$	1	
R <sub>6</sub>	" 12 K $\Omega$ " " "	1		C <sub>25</sub>	" " " " " "	1	
R <sub>7</sub>	Composition 100 $\Omega$ RC $\frac{1}{2}$ $\pm 10\%$	1		C <sub>26</sub>	Electrolytic 10 $\mu$ F 15WV	1	
R <sub>8</sub>	Carbon 68 K $\Omega$ RD $\frac{3}{4}$ L $\pm 5\%$	1		C <sub>27</sub>	" 10 $\mu$ F 10WV	1	
R <sub>9</sub>	" 22 K $\Omega$ " " "	1		C <sub>28</sub>	" 10 $\mu$ F 10WV	1	
R <sub>10</sub>	" 100 K $\Omega$ " " "	1		C <sub>29</sub>	Mylar 0.001 $\mu$ F 50WV $\pm 20\%$ (MFL)	1	
R <sub>11</sub>	Composition 470 K $\Omega$ RC $\frac{1}{2}$ $\pm 10\%$	1		C <sub>30</sub>	Electrolytic 20+20+10 $\mu$ F 350WV	1	
				C <sub>31-1, 2</sub>	MP 1.5 $\mu$ F + 0.5 $\mu$ F 250WV $\pm 10\%$	1	
				C <sub>32</sub>	Mylar 0.002 $\mu$ F 50WV $\pm 10\%$	1	



## Parts List

### II. K. CABINET & APPEARANCE ITEM

Symbol No.	Description	Q'ty	Remarks	Symbol No.	Description	Q'ty	Remarks
K1	Cabinet Assembly	1		K13	Fiber Washer for Reel Panel	2	
K2	Specification Label	1		K14	Head Cover Mounting Screw Post (Left)	1	H11
K3	Indicating Plate for Control Panel	1		K15	Special Washer (B) (for Fixing the Deck to Cabinet)	4	
K4	Function Selector Knob Assembly	1		K16	Felt for Function Selector Knob	1	
K5	Control Panel	1		K17	Fast Forward Lever and Instant Stop Lever Knob	2	
K6	Reel Panel	1		K18	Panel Spacer	4	
K7	Head Cover Holding Pin	1	H3	K19	Speed Selector Knob	1	
K8	Head Cover	1		K20	Set Screw for Speed Selector Knob	1	
K9	Volume Control Knob	1		K21	Stroboscope Disc	1	P9
K10	Escutecheon for Input Jack	1		K22	Felt for Reel Panel	1	
K11	" " for Output Jack	1					
K12	Woolen Paper C	2					

### III. MECHANICAL BLOCK

Symbol No.	Description	Q'ty	Remarks	Symbol No.	Description	Q'ty	Remarks
<b>A. Amplifier Block</b>				G2	Base Plate Assembly	1	
A1	Amplifier Chassis Assembly	1		G3	Tape Counter Mounting Post	2	
A2	Chassis for Power Supply	1		G4	Spacer for Pulley Shaft	1	
A3	Lead Wire Retainer	1		G5	Sleeve for Tape Counter Belt	1	
A4	Restoring Spring for Rec. Lever	1	U3	G6	Tape Counter Belt Pulley	2	
A5	Spring for Rec. Lever	1	U4	G7	Tape Counter Belt	2	
A6	Microphone Jack Ornamental Plate (A)	1		G8	Felt Washer for Panel	3	
A7	" " " " (B)	1		G9	Woolen Paper (120 mm length)	2	
A8	Printed Circuit Board	1	E1	G10	4φ Paper Washer for Counter Belt	2	
A9	Slide Switch Spacer	2		G11	Cushion for Level Meter	1	
A10	Cord Retainer	1		G12	Leaf Spring Holder	1	
A11	Vacuum Tube Fixture	1		G13	Fast Forward Cam Stopper	1	
A12	Miniature Jack Spacer	4		G14	Tape Counter	1	
A13	Vacuum Tube Retaining Spring	2		G15	Tape Counter Pulley Shaft	1	
A14	Oscillation Transformer Holding Bracket	1		G16	MIC Jack Holding Bracket	1	
<b>B. Brake Mechanism</b>				<b>H. Head Deck</b>			
B1	Instant Stop Arm Assembly	1		H1	Head Base Plate	1	
B2	Instant Stop Lever Assembly	1		H2	Head Mounting Bracket	1	
B3	Instant Stop Lever Guide	1		H3	Head Cover Holding Pin	1	K7
B4	Instant Stop Lever Spring	1		H4	Panel Mounter	1	
B5	Rewind Spring for Instant Stop Lever	1		H5	Tape Pad Shifter	1	
B6	Brake Block	1		H6	Spacer for Erase Head	1	
B7	Brake Lever	1		H7	Head Shield Plate for Erase Head	1	
B8	Brake Block Spring	1		H8	Tape Retainer	1	
B9	Brake Felt	1		H9	Tape Guide (A)	1	
B10	Brake Spring	1		H10	Hinge Spring for Tape Pad	1	
<b>F. Function Selector Mechanism</b>				H11	Head Cover Holding Pin	1	K14
F1	Fast Forward Cam	1		H12	Tape Pad for Erase Head	1	
F2	Function Selector Cam Assembly	1		H13	Head Shield Plate for Rec./P.B. Head	1	
F3	Stepper Arm Assembly	1		H14	Head Adjustment Spring	1	
F4	Function Selector Cam Shaft	1		H15	Head Adjustment Screw	1	
F5	Push Rod (A) for Function Selector Cam	1		H16	Tape Guide (Right)	1	
F6	Stepper Arm Shaft	1		H17	Tape Guide (Right) Spring	1	
F7	Rewind Spring for Function Selector Cam	1		H18	Tape Pad for Rec./P.B. Head	1	
F8	Setting Screw for Function Selector Cam	2		<b>L. Idler Mechanism</b>			
F9	Stepper Arm Spring	1		L1	Capstan Idler Assembly	1	
F10	Push Rod for Rewind	1		L2	Idler Shaft (C) for Rewind Idler (Right)	1	
F11	Restoring Spring for Fast Forward	1		L3	Idler Plate for Take-up Idler	1	
<b>G. Deck</b>				L4	Take-up Idler Assembly	1	
G1	Leg Plate Assembly	1		L5	Rewind Idler Assembly	1	

## Parts List

Symbol No.	Description	Q'ty	Remarks	Symbol No.	Description	Q'ty	Remarks
L5-1	Tire	(2)		Q2	Take-up Reel Shaft	1	
L5-2	Idler	(2)		Q3	Feed Spindle Deck	1	
L6	Idler Arm (E) Assembly	1		Q4	Feed Reel Shaft	1	
L7	Capstan Idler Arm	1		Q5	Feed Spindle Spacer	1	
L8	Tone Control Knob	1		Q6	Spring for Rec. Push Button	1	
L9	Idler Pressure Spring	1		Q7	Friction Plate for Feed Reel Table	1	
L10	Idler Guide Bracket	1		Q8	Feed Reel Table Assembly	1	
L11	Idler Shifting Arm Guide	2		Q9	Take-up Reel Table Assembly	1	
L12	5φ Washer for Capstan Idler	2					
L13	Pull Rod for Idler Plate	1			<b>S. Speed Selector Mechanism</b>		
L14	Motor Pulley Set Screw	1		S1	Speed Selector Shaft Spring	1	
L15	Helical Spring (A) for Idler Plate	1		S2	Speed Selector Shaft	1	
L16	" (E) for Idler Plate A	1		S3	Taper Pin 2×20 (for Speed Selector)	2	
L17	Spring (H) for Idler Arm	1			<b>U. Recording Mechanism</b>		
L18	Oil Retainer for Take-up (Capstan)			U1	Recording Lever Assembly B	1	
L19	Paper Washer for Take-up (Capstan)			U2	Record Lock Button Assembly	1	
	Idler 5φ	2		U3	Restoring Spring for Rec. Lever	1	A4
L20	Paper Washer for Rewind Idler 6φ	3		U4	Spring for Rec. Lever	1	A5
L21	Idler Guide	1		U5	Record Lock Lever	1	
L22	Idler Spring	2		U6	Lock Lever Guide	1	
	<b>M. Motor</b>			U7	Push Button Collar	1	
M1	Motor Pulley	1		U8	Rec. Lock Lever Spring	1	
	<b>N. Capstan and Flywheel</b>			U9	Record Lock Lever Shifter	1	P7
				U10	Recording Lever Assembly C	1	
N1	Capstan Shaft Assembly	1			<b>Z. Accessories &amp; Miscellaneous</b>		
N2	Capstan Bearing Retainer	1		Z1	Tack Label A	1	
N3	Capstan Bearing Dust Cover	1		Z2	" B	1	
N4	Driver Shaft Bearing	1		Z3	Instruction Manual	1	
N5	Oil Retainer Cover (Paper Washer)	1		Z4	Inspection Card	1	
N6	Oil Absorber Felt for Flywheel	1		Z5	Microphone F96 (LM)	1	
N7	Oil Retainer (for Flywheel Shaft)	1		Z6	Recording Tape " Super 5 "	1	
N8	Capstan Shaft	1		Z7	Reel R-5A	1	
N9	Capstan Screw	1		Z8	Connection Cord RK-36	1	
N10	Capstan A 50 c/s	1	Z15	Z9	Power Cord DK-14	1	
N11	Capstan B 60 c/s	1	Z16	Z10	SONY Oil OL-1K	1	
	<b>P. Pinch Roller Mechanism</b>			Z11	Splicing Tape PS-2	1	
P1	Pinch Lever Assembly	1		Z12	Crystal Earphone CE-3	1	
P2	Pinch Roller Spacer	1		Z13	Accessory Bag	2	
P3	Spring for Pinch Lever	1		Z14	Desiccant	1	
P4	Pinch Roller A	1		Z15	Capstan 50 c/s	1	N10
P5	" B	1		Z16	" 60 c/s	1	N11
P6	Pinch Roller Oil Retainer	1		Z17	Pinch Roller (A)	1	
P7	Record Lock Lever Shaft	1	U9	Z18	" (B)	1	
P8	Pinch Roller Fixture	1		Z19	Carton	1	
P9	Stroboscope Disc	1	K21	Z20	Polyethylene Bag	1	
	<b>Q. Reel Table Mechanism</b>			Z21	Cushion for Carton	1	
Q1	Take-up Spindle Drum Assembly	1		Z22	Tie-up Belt	1	

### Screws, Washers and Miscellaneous

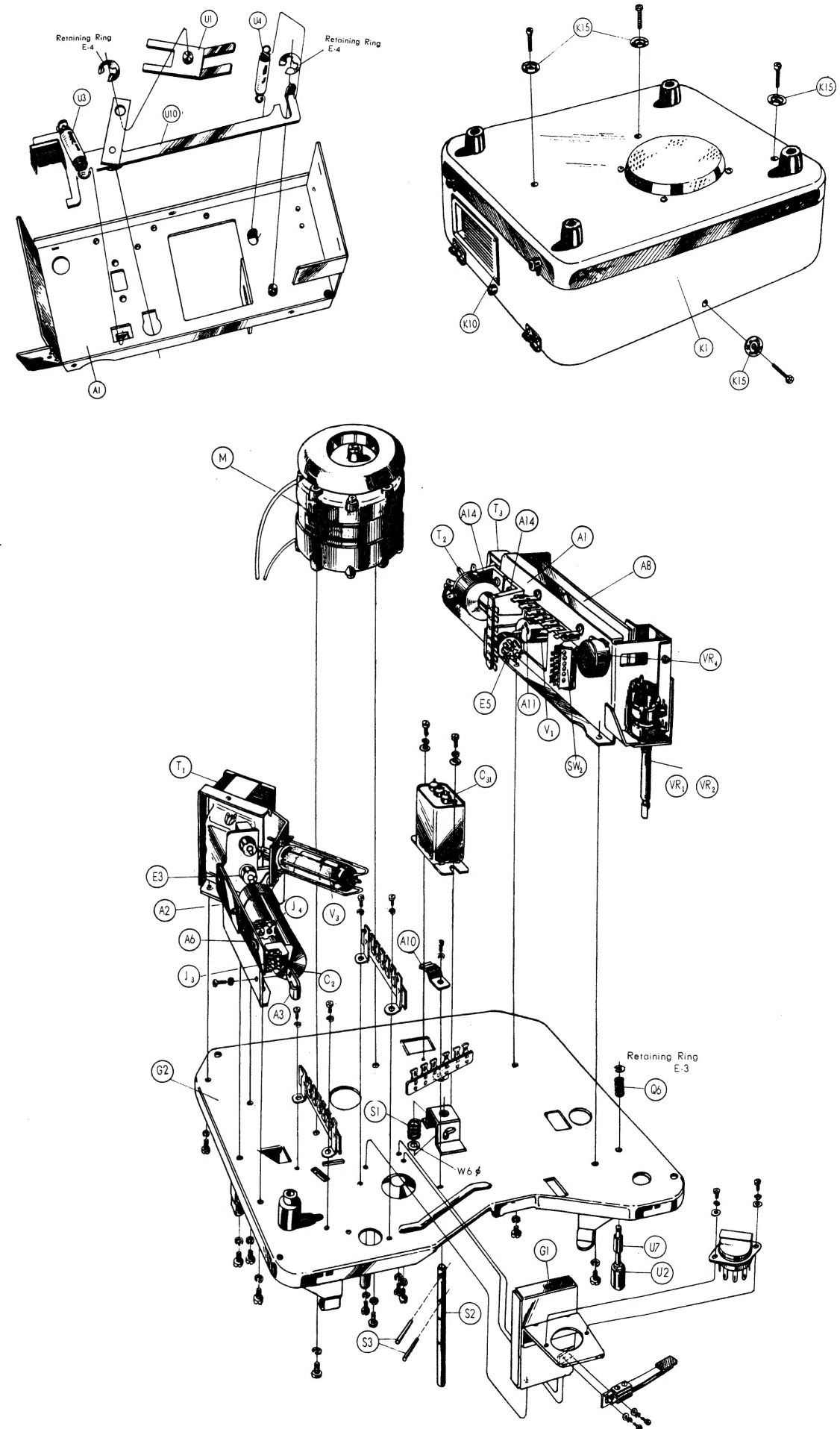
	Symbol No.	Description	Q'ty		Symbol No.	Description	Q'ty
Screw	B⊕3×8	Reel Panel	2		RF⊕3×6	Idler Guide Mounting Bracket	2
	" 3×6	Control Panel	2		B⊕3×6	Leg	3
	RF⊕4×12	Cabinet	4		RF⊕4×8	Head Deck	2
	" 4×8	Motor	2		B⊕4×8	"	1
	" 3×5	MP Capacitor	2		" 3×6	"	1
	" 3×5	Idler Guide	4		K⊕2×26	"	1
	" 3×8	Stepper Arm	1		RF⊕4×6	Power Supply	4
	" 3×6	Idler Guide (B)	1		" 3×18	Tape Index Counter	2

## Parts List

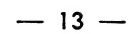
## Exploded Diagram

( 1 )

	Symbol No.	Description	Q'ty		Symbol No.	Description	Q'ty
	RF⊕3×6	Amplifier Chassis	4	Washer	2φ (small)	Head Deck	4
	// 3×6	Terminal Strip, 2L-5P	6		2φ (small)	Leaf Spring	2
	// 3×6	Lock Lever Guide	1		2φ (small)	Leaf Spring (Equalizer Switch)	2
	// 3×6	Wire Retainer	1		2.6φ	Cabinet Feet (B)	2
	// 3×6	Instant Stop Lever Guide	2		2.6φ	Removal Hinge	8
	// 3×6	Pinch Lever	2		3φ	Head Cover Holding Stud	1
	// 3×6	Head Deck	7		3φ	MP Capacitor	2
	// 2.6×6	//	2		3φ	Stepper Arm	2
	T⊕3×12	//	1		3φ	Idler Guide (B)	1
	// 3×6	//	1		3φ	Amplifier Chassis	3
	R⊕2.6×5	//	1		3φ	Speaker	4
	RF⊕2×4	//	4		3φ	Block Electrolytic Capacitor	2
	T⊕3×5	Feed Reel Table Ass'y	1		3φ	Output Transformer (T <sub>3</sub> )	2
	// 3×5	Take-up Reel Table Ass'y	1		3φ	Amp. Chassis	2
	RF⊕2×4	Leaf Spring	2		3φ	Ventilation Net	4
	// 2×4	Leaf Spring (Equalizer Switch)	2		3φ	Lock Holding Plate	2
	K⊕2×5	Erase Head	2		3φ	Speaker Baffle Board	3
	RF⊕3×5	Idler Spring	2		3φ	Rubber Band	2
	// 3×6	Instant Stop Arm	1		3φ	MIC Retaining Band	2
	// 3×6	Input Jack	2		3φ (small)	Head Deck	1
	// 3×6	AC Socket	2	3φ (small)	Instant Stop Arm	1	
	// 3×6	Block Electrolytic Capacitor	2	4φ	Cabinet Feet	4	
	// 3×6	Vacuum Tube Socket	2	6φ (t 0.5)	Head Deck	1	
	// 3×6	Fuse Holder	1	6φ (t 0.3)	Head Deck	1	
	RF3×6	Lead Retainer	1	6φ (t 0.5)	Speed Selector Ass'y	1	
	RF⊕3×6	Oscillation Transformer		6φ (t 0.5)	Idler Arm	1	
		Holding Plate	2	Spring Washer	SW2φ	Leaf Spring	2
	// 2.6×6	Rec/PB Selector Switch	2		SW2φ	Leaf Spring (Equalizer Switch)	2
	// 3×6	2L-5P Terminal	2		SW2.6φ	Head Deck	2
	// 3×8	Output Transformer (T <sub>3</sub> )	2		SW2.6φ	Rec/PB Selector Switch	2
	// 3×6	Vacuum Tube Socket	2		SW3φ	MP Capacitor	2
	// 3×6	Printed Circuit Board	2		SW3φ	Idler Guide	4
	RK⊕4×18	Handle	2		SW3φ	Stepper Arm	1
	B⊕3×8	Ventilation Net	4		SW3φ	Idler Guide (B)	1
	RK⊕3×8	Lock	2		SW3φ	Idler Guide Mounting Bracket	1
	R⊕3×8	Lock Holding Plate	2		SW3φ	Belt Pulley Shaft	1
	K⊕3×16	Speaker Baffle Board	3		SW3φ	Tape Index Counter	2
	R⊕2.6×14	Cabinet Feet (B)	2		SW3φ	Amplifier Chassis	4
	// 2.6×10	//	1		SW3φ	Terminal Strip 2L-5P	6
	RK⊕2.6×8	Removal Hinge	8		SW3φ	Lock Lever Guide	1
RF⊕4×20	Cabinet Feet	4	SW3φ		Wire Retainer	1	
R⊕2.1×6.3	MIC Retainer	2	SW3φ		Pinch Lever	2	
			SW3φ		Head Deck	5	
Wood Screw	R⊕2.1×6.3	Escutcheon (A)	4		SW3φ	Idler Spring	2
	// 2.1×6.3	Escutcheon (B)	4		SW3φ	Instant Stop Arm	1
	K⊕2.1×6.3	Speaker Baffle Board	3		SW3φ	Block Electrolytic Capacitor	2
	R⊕2.7×7	Plastic Part on Cabinet		SW3φ	Vacuum Tube Socket	2	
		Cover	2	SW3φ	Lead Retainer	1	
	// 2.1×10	Cord Retainer	4	SW3φ	Oscillation Transformer		
	2.7×7	Rubber Band	2		Holding Plate	2	
	R⊕2.7×7	MIC Retaining Band	2	SW3φ	2L-5P Terminal	2	
	K⊕2.4×7	MIC Cord Retainer	2	SW3φ	Output Transformer (T <sub>3</sub> )	2	
	R1×6	Serial No. Plate	4	SW3φ	Vacuum Tube Socket	2	
				SW3φ	Amp. Chassis	2	
				SW4φ	Head Deck	2	
Nail Star Washer	3φ	Instant Stop Lever Guide	2	SW4φ	Reel Table Spindle	2	
	3φ	Head Deck	2	SW4φ	Power Supply	4	
				N2.6φ	Cabinet Feet (B)	2	
	Retaining Ring	E-5	Push Button	1	N2.6φ	Removal Hinge	8
			Idler Arm (E)	1	N3φ	Belt Pulley Shaft	1
		E-5	Idler Arm	1	N3φ	Stepper Arm	1
		E-3	Brake Block	1	N3φ	Control Panel	1
			Idler (A) & (B)	2	N3φ	Speaker	4
			Counter Pulley	1	N3φ	Vacuum Tube Socket	2
			Idler	2	N3φ	//	2
		E-5	Rec. Lock Lever	1	N3φ	Ventilation Net	4
		E-5	Instant Stop Lever	1	N3φ	Lock Holding Plate	2
E-5		Head Deck	1	N4φ	Reel Table Spindle	2	
E-5		Speed Selector Shaft	1	N4φ	Cabinet Feet	4	
E-4		Cam Shaft Ass'y	1	N4φ (large)	Recording Button	1	
E-4	Rec. Lever (C)	1	N3φ	Speaker Baffle Board	3		
	Rec. Lever (C)	1					
Revet	K3×8	Cabinet Reinforcing Bracket	8				



(2)



(3)

